

SEQUENCE LISTING

<110> E. I. du Pont de Nemours and Company

<120> Chromatin Associated Proteins

<130> BB-1118-A

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<150> 60/092,841

<151> July 14, 1998

<160> 8

<170> Microsoft Office 97

<210> 1

<211> 1990

<212> DNA

<213> Oryza sativa

<400> 1

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 aaaaaaaaaa 1990

<210> 2
 <211> 493
 <212> PRT
 <213> Oryza sativa

<400> 2

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 20 25 30
 Tyr Gly Leu Leu Asp Gln Met Gln Val Leu Lys Pro His Pro Ala Arg
 35 40 45
 Asp Arg Asp Leu Cys Arg Phe His Ala Asp Asp Tyr Val Ala Phe Leu
 50 55 60
 Arg Ser Val Thr Pro Glu Thr Gln Gln Asp Gln Ile Arg Ala Leu Lys
 65 70 75 80
 Arg Phe Asn Val Gly Glu Asp Cys Pro Val Phe Asp Gly Leu Tyr Ser
 85 90 95
 Phe Cys Gln Thr Tyr Ala Gly Gly Ser Val Gly Gly Ala Val Lys Leu
 100 105 110
 Asn His Gly His Asp Ile Ala Ile Asn Trp Ala Gly Gly Leu His His
 115 120 125
 Ala Lys Lys Cys Glu Ala Ser Gly Phe Cys Tyr Val Asn Asp Ile Val
 130 135 140
 Leu Ala Ile Leu Glu Leu Leu Lys Tyr His Gln Arg Val Leu Tyr Val
 145 150 155 160
 Asp Ile Asp Ile His His Gly Asp Gly Val Glu Glu Ala Phe Tyr Thr
 165 170 175
 Thr Asp Arg Val Met Thr Val Ser Phe His Lys Phe Gly Asp Tyr Phe
 180 185 190
 Pro Gly Thr Gly Asp Ile Arg Asp Ile Gly His Ser Lys Gly Lys Tyr
 195 200 205
 Tyr Ser Leu Asn Val Pro Leu Asp Asp Gly Ile Asp Asp Glu Ser Tyr
 210 215 220
 Gln Ser Leu Phe Lys Pro Ile Met Gly Lys Val Met Glu Val Phe Arg
 225 230 235 240
 Pro Gly Ala Val Val Leu Gln Cys Gly Ala Asp Ser Leu Ser Gly Asp
 245 250 255
 Arg Leu Gly Cys Phe Asn Leu Ser Ile Arg Gly His Ala Glu Cys Val
 260 265 270
 Arg Phe Met Arg Ser Phe Asn Val Pro Leu Leu Leu Leu Gly Gly Gly
 275 280 285

Gly Tyr Thr Ile Arg Asn Val Ala Arg Cys Trp Cys Tyr Glu Thr Gly
 290 295 300
 Val Ala Leu Gly His Glu Leu Thr Asp Lys Met Pro Pro Asn Glu Tyr
 305 310 315 320
 Phe Glu Tyr Phe Gly Pro Asp Tyr Thr Leu His Val Ala Pro Ser Asn
 325 330 335
 Met Glu Asn Lys Asn Thr Arg Gln Gln Leu Asp Asp Ile Arg Ser Arg
 340 345 350
 Leu Leu Asp Asn Leu Ser Lys Leu Arg His Ala Pro Ser Val Gln Phe
 355 360 365
 Gln Glu Arg Pro Pro Glu Ala Glu Leu Pro Glu Gln Asp Glu Asp Gln
 370 375 380
 Glu Asp Pro Asp Glu Arg His His Ala Asp Ser Asp Val Glu Met Asp
 385 390 395 400
 Asp Val Lys Pro Leu Asp Asp Ser Gly Arg Arg Ser Ser Ile Gln Asn
 405 410 415
 Val Arg Val Lys Arg Glu Ser Ala Glu Thr Asp Ala Ala Asp Gln Asp
 420 425 430
 Gly Asn Arg Val Ala Ala Glu Asn Thr Lys Gly Thr Glu Pro Ala Ala
 435 440 445
 Asp Gly Val Gly Ser Ser Lys Gln Thr Val Pro Thr Asp Ala Ser Ala
 450 455 460
 Met Ala Ile Asp Glu Pro Gly Ser Leu Lys Val Glu Pro Asp Asn Ser
 465 470 475 480
 Asn Lys Leu Gln Asp Gln Pro Ser Val His Gln Lys Thr
 485 490

<210> 3
 <211> 1805
 <212> DNA
 <213> Glycine max

<400> 3
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 aactgagtaa tggaaagtgg agggaactcc cttccatcag ggtagatgg tgtgaagaga 180
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 gatattcgtg atattggata tgctaaaggg aaatattatt cactaaatgt tcccttggtat 840
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atctggaaac tgaagagata tggtgcaagc ttgccttggc ttttgatgtt tcatattact 1740
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<210> 4

<211> 473

<212> PRT

<213> Glycine max

<400> 4

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          20          25          30
Gly Gln Gly His Pro Met Lys Pro His Arg Ile Arg Met Thr His Ala
          35          40          45
Leu Leu Ala His Tyr Gly Leu Leu Gln His Met Gln Val Leu Lys Pro
          50          55          60
Met Ala Ala Lys Asp Arg Asp Leu Cys Lys Phe His Ala Asp Asp Tyr
          65          70          75          80
Val Ala Phe Leu Arg Gly Ile Thr Pro Glu Thr Gln Gln Asp Gln Leu
          85          90          95
Arg Gln Leu Lys Arg Phe Asn Val Gly Glu Asp Cys Pro Val Phe Asp
          100          105          110
Gly Leu Tyr Ser Phe Cys Gln Thr Tyr Ala Gly Gly Ser Val Gly Gly
          115          120          125
Ala Leu Lys Leu Asn His Gly Val Cys Asp Ile Ala Ile Asn Trp Ala
          130          135          140
Gly Gly Leu His His Ala Lys Lys Cys Glu Ala Ser Gly Phe Cys Tyr
          145          150          155          160
Val Asn Asp Ile Val Leu Ala Ile Leu Glu Leu Leu Lys Ile His Glu
          165          170          175
Arg Val Leu Tyr Val Asp Ile Asp Ile His His Gly Asp Gly Val Glu
          180          185          190

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Glu Ala Phe Tyr Thr Thr Asp Arg Val Met Thr Val Ser Phe His Lys
 195 200 205
 Phe Gly Asp Tyr Phe Pro Gly Thr Gly Asp Ile Arg Asp Ile Gly Tyr
 210 215 220
 Ala Lys Gly Lys Tyr Tyr Ser Leu Asn Val Pro Leu Asp Asp Gly Ile
 225 230 235 240
 Asp Asp Glu Ser Tyr Gln Ser Leu Phe Lys Pro Ile Met Gly Lys Val
 245 250 255
 Met Glu Ile Phe Arg Pro Gly Ala Val Val Leu Gln Cys Gly Ala Asp
 260 265 270
 Ser Leu Ser Gly Asp Arg Leu Gly Cys Phe Asn Leu Ser Ile Lys Gly
 275 280 285
 His Ala Glu Cys Val Arg Tyr Met Arg Ser Phe Asn Val Pro Leu Leu
 290 295 300
 Leu Leu Gly Gly Gly Gly Tyr Thr Ile Arg Asn Val Ala Arg Cys Trp
 305 310 315 320
 Cys Phe Glu Thr Ser Val Ala Leu Gly Ile Glu Leu Asp Asp Lys Met
 325 330 335
 Pro Gln His Glu Tyr Tyr Glu Tyr Phe Gly Pro Asp Tyr Thr Leu His
 340 345 350
 Val Ala Pro Ser Asn Met Glu Asn Lys Asn Ser Arg Gln Leu Leu Asp
 355 360 365
 Glu Ile Arg Ala Lys Leu Leu Asp Asn Leu Ser Arg Leu Gln His Ala
 370 375 380
 Pro Ser Val Pro Phe Gln Glu Arg Pro Pro Asp Ala Glu Leu Leu Glu
 385 390 395 400
 Arg Asp Glu Asp Gln Asp Asp Arg Asp Glu Arg Trp Asp Pro Asp Ser
 405 410 415
 Asp Arg Glu Val Gly Asp Asp Ser Asn Pro Val Arg Arg Arg Val Lys
 420 425 430
 Ser Glu Cys Val Asp Ala Glu Asp Lys Asp Thr Val Ser Gly Val Asp
 435 440 445
 Ser Met Ala Val Asp Glu Pro Cys Ile Lys Glu Glu Gln Asp Asn Leu
 450 455 460
 Lys Glu Leu Ser Asp His Arg Pro Arg
 465 470

<210> 5
 <211> 541
 <212> DNA
 <213> Triticum aestivum

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 gcagggccac ccgatgaagc cgcaccgcat ccgcatgacc cactcgctgc tggcgagta 240
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<210> 6
 <211> 120
 <212> PRT
 <213> Triticum aestivum

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 <222> (24)

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 <221> UNSURE
 <222> (108)

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 <221> UNSURE
 <222> (118)

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 Gly Pro Asp Gly Gln Lys Arg Xaa Val Cys Tyr Phe Tyr Asp Ser Glu
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 Val Gly Asn Tyr Tyr Tyr Gly Gln Gly His Pro Met Lys Pro His Arg
 35 40 45
 Ile Arg Met Thr His Ser Leu Leu Ala Gln Tyr Gly Leu Leu Asp Gln
 50 55 60
 Met Gln Val Leu Arg Pro Asn Pro Ala Arg Asp Arg Asp Leu Cys Arg
 65 70 75 80
 Phe His Ala Asp Asp Tyr Ile Ser Phe Leu Arg Ser Val Thr Pro Glu
 85 90 95
 Thr Gln Gln Asp Gln Ile Arg Gly Leu Lys Arg Xaa Asn Val Gly Glu
 100 105 110
 Glu Trp Pro Val Leu Xaa Gly Leu
 115 120

<210> 7
 <211> 513
 <212> PRT
 <213> Zea mays

<400> 7

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 Gly Pro Asp Gly Gln Lys Arg Arg Val Cys Tyr Phe Tyr Asp Pro Asp
 20 25 30
 Val Gly Asn Tyr Tyr Tyr Gly Gln Gly His Pro Met Lys Pro His Arg
 35 40 45
 Ile Arg Met Thr His Ser Leu Leu Ala Arg Tyr Gly Leu Leu Asn Gln
 50 55 60
 Met Gln Val Tyr Arg Pro Asn Pro Ala Arg Glu Arg Glu Leu Cys Arg
 65 70 75 80
 Phe His Ala Glu Glu Tyr Ile Asn Phe Leu Arg Ser Val Thr Pro Glu
 85 90 95
 Thr Gln Gln Asp Gln Ile Arg Leu Leu Lys Arg Phe Asn Val Gly Glu
 100 105 110

Glu Cys Pro Val Leu Asp Gly Leu Tyr Ser Phe Cys Gln Thr Tyr Ala
 115 120 125
 Gly Ala Ser Val Gly Gly Ala Val Lys Phe Asn His Gly His Asp Ile
 130 135 140
 Ala Ile Asn Trp Ser Gly Gly Leu His His Ala Lys Lys Cys Glu Ala
 145 150 155 160
 Ser Gly Phe Cys Tyr Val Asn Asp Ile Val Leu Ala Ile Leu Glu Leu
 165 170 175
 Leu Lys His His Glu Arg Val Leu Tyr Val Asp Ile Asp Ile His His
 180 185 190
 Gly Asp Gly Val Glu Glu Ala Phe Tyr Thr Thr Asp Arg Val Met Thr
 195 200 205
 Val Ser Phe His Lys Phe Gly Asp Tyr Phe Pro Gly Thr Gly Asp Ile
 210 215 220
 Arg Asp Ile Gly His Ser Lys Gly Lys Tyr Tyr Ser Leu Asn Val Pro
 225 230 235 240
 Leu Asp Asp Gly Ile Asp Asp Glu Ser Tyr Gln Ser Leu Phe Lys Pro
 245 250 255
 Ile Met Gly Lys Val Met Glu Val Phe Arg Pro Gly Ala Val Val Leu
 260 265 270
 Gln Cys Gly Ala Asp Ser Leu Ser Gly Asp Arg Leu Gly Cys Phe Asn
 275 280 285
 Leu Ser Ile Lys Gly His Ala Glu Cys Val Arg Tyr Met Arg Ser Phe
 290 295 300
 Asn Val Pro Leu Leu Leu Leu Gly Gly Gly Tyr Thr Ile Arg Asn
 305 310 315 320
 Val Ala Arg Cys Trp Cys Tyr Glu Thr Gly Val Ala Leu Gly Gln Glu
 325 330 335
 Pro Glu Asp Lys Met Pro Val Asn Glu Tyr Tyr Glu Tyr Phe Gly Pro
 340 345 350
 Asp Tyr Thr Leu His Val Ala Pro Ser Asn Met Glu Asn Lys Asn Thr
 355 360 365
 Arg Gln Gln Leu Asp Asp Ile Arg Ser Lys Leu Ser Lys Leu Arg His
 370 375 380
 Ala Pro Ser Val His Phe Gln Glu Arg Val Pro Asp Thr Glu Ile Pro
 385 390 395 400
 Glu Gln Asp Glu Asp Gln Asp Asp Pro Asp Glu Arg His Asp Pro Asp
 405 410 415
 Ser Asp Met Glu Val Asp Asp His Lys Ala Val Glu Glu Ser Ser Arg
 420 425 430

Arg Ser Ile Leu Gly Ile Lys Ile Lys Arg Glu Phe Gly Glu Asn Ala
435 440 445

Thr Arg Val Gln Asp Gly Gly Arg Val Ala Ser Glu His Arg Gly Leu
450 455 460

Glu Pro Met Ala Glu Asp Ile Gly Ser Ser Lys Gln Ala Pro Gln Ala
465 470 475 480

Asp Ala Ser Ala Met Ala Ile Asp Glu Pro Ser Asn Val Lys Asn Glu
485 490 495

Pro Glu Ser Ser Thr Lys Leu Gln Gly Gln Ala Ala Ala Tyr His Lys
500 505 510

Pro

<210> 8

<211> 501

<212> PRT

<213> Arabidopsis thaliana

<400> 8

Met Asp Thr Gly Gly Asn Ser Leu Ala Ser Gly Pro Asp Gly Val Lys
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Arg Lys Val Cys Tyr Phe Tyr Asp Pro Glu Val Gly Asn Tyr Tyr Tyr
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Gly Gln Gly His Pro Met Lys Pro His Arg Ile Arg Met Thr His Ala
35 40 45

Leu Leu Ala His Tyr Gly Leu Leu Gln His Met Gln Val Leu Lys Pro
50 55 60

Phe Pro Ala Arg Asp Arg Asp Leu Cys Arg Phe His Ala Asp Asp Tyr
65 70 75 80

Val Ser Phe Leu Arg Ser Ile Thr Pro Glu Thr Gln Gln Asp Gln Ile
85 90 95

Arg Gln Leu Lys Arg Phe Asn Val Gly Glu Asp Cys Pro Val Phe Asp
100 105 110

Gly Leu Tyr Ser Phe Cys Gln Thr Tyr Ala Gly Gly Ser Val Gly Gly
115 120 125

Ser Val Lys Leu Asn His Gly Leu Cys Asp Ile Ala Ile Asn Trp Ala
130 135 140

Gly Gly Leu His His Ala Lys Lys Cys Glu Ala Ser Gly Phe Cys Tyr
145 150 155 160

Val Asn Asp Ile Val Leu Ala Ile Leu Glu Leu Leu Lys Gln His Glu
165 170 175

Arg Val Leu Tyr Val Asp Ile Asp Ile His His Gly Asp Gly Val Glu
180 185 190

Glu Ala Phe Tyr Ala Thr Asp Arg Val Met Thr Val Ser Phe His Lys
 195 200 205
 Phe Gly Asp Tyr Phe Pro Gly Thr Gly His Ile Gln Asp Ile Gly Tyr
 210 215 220
 Gly Ser Gly Lys Tyr Tyr Ser Leu Asn Val Pro Leu Asp Asp Gly Ile
 225 230 235 240
 Asp Asp Glu Ser Tyr His Leu Leu Phe Lys Pro Ile Met Gly Lys Val
 245 250 255
 Met Glu Ile Phe Arg Pro Gly Ala Val Val Leu Gln Cys Gly Ala Asp
 260 265 270
 Ser Leu Ser Gly Asp Arg Leu Gly Cys Phe Asn Leu Ser Ile Lys Gly
 275 280 285
 His Ala Glu Cys Val Lys Phe Met Arg Ser Phe Asn Val Pro Leu Leu
 290 295 300
 Leu Leu Gly Gly Gly Gly Tyr Thr Ile Arg Asn Val Ala Arg Cys Trp
 305 310 315 320
 Cys Tyr Glu Thr Gly Val Ala Leu Gly Val Glu Val Glu Asp Lys Met
 325 330 335
 Pro Glu His Glu Tyr Tyr Glu Tyr Phe Gly Pro Asp Tyr Thr Leu His
 340 345 350
 Val Ala Pro Ser Asn Met Glu Asn Lys Asn Ser Arg Gln Met Leu Glu
 355 360 365
 Glu Ile Arg Asn Asp Leu Leu His Asn Leu Ser Lys Leu Gln His Ala
 370 375 380
 Pro Ser Val Pro Phe Gln Glu Arg Pro Pro Asp Thr Glu Thr Pro Glu
 385 390 395 400
 Val Asp Glu Asp Gln Glu Asp Gly Asp Lys Arg Trp Asp Pro Asp Ser
 405 410 415
 Asp Met Asp Val Asp Asp Asp Arg Lys Pro Ile Pro Ser Arg Val Lys
 420 425 430
 Arg Glu Ala Val Glu Pro Asp Thr Lys Asp Lys Asp Gly Leu Lys Gly
 435 440 445
 Ile Met Glu Arg Gly Lys Gly Cys Glu Val Glu Val Asp Glu Ser Gly
 450 455 460
 Ser Thr Lys Val Thr Gly Val Asn Pro Val Gly Val Glu Glu Ala Ser
 465 470 475 480
 Val Lys Met Glu Glu Glu Gly Thr Asn Lys Gly Gly Ala Glu Gln Ala
 485 490 495
 Phe Pro Pro Lys Thr
 500